

United States Patent and Trademark Office

*₹*5

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--|---------------|----------------------|-------------------------|------------------|--|
| 10/022,529 | 12/20/2001 | Michael M. Kinahan | A887952US | 2181 | |
| 7590 06/08/2006 | | | EXAMINER | | |
| | D. Doak Horne | | | JAIN, RAJ K | |
| Gowling Lafleur Henderson LLP Suite 1400 | | | ART UNIT | PAPER NUMBER | |
| 700 2nd Street S.W. | | | 2616 | | |
| Calgary, AB T2P 4V5 CANADA | | | DATE MAILED: 06/08/2006 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|--|--|--|--|--|--|--|
| | 10/022,529 | KINAHAN ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Raj K. Jain | 2616 | | | | |
| The MAILING DATE of this communication app Period for Reply | | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period was reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from 1, cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 09 M | Responsive to communication(s) filed on <u>09 May 2006</u> . | | | | | |
| , | · | | | | | |
| • | ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under E | :х рапе Quayle, 1935 С.D. 11, 45 | 33 O.G. 213. | | | | |
| Disposition of Claims | | | | | | |
| 4) ☐ Claim(s) <u>25-36,38-43</u> is/are pending in the app 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>25-36,38-43</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | r election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examine | r. | | | | | |
| 10)⊠ The drawing(s) filed on <u>20 February 2002</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the | drawing(s) be held in abeyance. See | e 37 CFR 1.85(a). | | | | |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority | s have been received. s have been received in Applicati | on No | | | | |
| application from the International Bureau | | 9 | | | | |
| * See the attached detailed Office action for a list | • | d. | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ate latent Application (PTO-152) | | | | |

DETAILED ACTION

Claim Objections

Applicant has misnumbered the claims as 25-43, claim 37 is missing: Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 25-36, 38-43 are rejected under 35 U.S.C. 102(anticipated) as being Haartsen et al by US006091954A.

Regarding claims 25, 35 and 43, Haartsen discloses a method and apparatus for providing a supplementary channel in a wireless system (Fig. 1, channel selection from a set of pre-allocated channels to choose from allows for providing a supplementary channel within a wireless system.) comprising the steps of:

identifying available resources at a plurality of channel element modules (CEM) in a base station (see Fig. 2, the base station 201 serves as the CEM, which shows a pool of channels as available resources to choose from.);

pre-allocating the available resources in a plurality of supplementary channels at a channel resource pool module (CRP) in the base station (see Fig. 2, col 7 lines 17-35, a CRP 201 has a set of pre-allocated channels to choose from based on a set of reuse

Art Unit: 2616

plans, each reuse plan has number of channels to choose from and therefore have a plurality of supplementary channels.);

receiving a request for an additional bandwidth at the CRP and matching the request with a member of the plurality of the supplementary channels pre-allocated at the CRP (see col 6 lines 10-45, each mobile unit is assigned an initial bandwidth allocation based on its bit rate requirements and link quality parameters. As the demand for bit rate increases (bandwidth) by the mobile, the base station evaluates the request to maintain link quality while providing the increased demand by the mobile.);

and assigning the supplemental channel to the request (see col 7 lines 37-63, once a base station with the required quality of the mobile is determined, the allocation of channel from the available channels is assigned, see Fig. 3.).

Regarding claims 26, 27, 32, 38 Haartsen discloses receiving and matching of available resources at the base station and splitting the resources into supplementary channels (see Fig. 2, col 3 lines 40-53, Fig. 2 shows reuse plans with number of channels within each plan and thus providing a supplementary channel for each mobile.).

Regarding claims 28, 30, 34, 40, Haartsen discloses defining capacity in terms of bit rate and link quality (see col 6 lines 10-20), the direction of operation of supplementary channels is determined by the request from the mobile station based on required bit rate (see col 6 lines 20-43.).

Regarding claims 29, 33, 41, Haartsen discloses maintaining a database of available channels associated with each base station (see col 8 lines 59-63.). The

Application/Control Number: 10/022,529

Art Unit: 2616

channels have status and location information based on the reuse plan as being highest reuse or lowest reuse (see Fig. 2) and mobiles service type (see col 8 lines 63-67.).

Regarding claim 36, Haartsen discloses a general channel pool (see Fig. 2) which receives the request from subsystems A-D acting as separate control modules.

Regarding claim 39, Haartsen discloses an allocation module 201 (see Fig. 2) with pre-allocated channels (channel pool within 201.).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 31 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen et al by (US006091954A) in view of Jabbarnezhad (5734697).

Haartsen discloses channel assignment technique in a wireless mobile communications system.

Haartsen fails to disclose a RAC within the wireless system.

Jabbarnezhad discloses use of RAC within a telecom system (see Fig. 9b, col 7 line 55-67.). The resource allocation command is used based on network performance index to reroute network traffic when performance is degraded.

Thus it would have been obvious at the time the invention was made to incorporate the teachings of Jabbarnezhad within Haartsen in order to maintain network

link quality a resource allocation command is implemented so as reroute traffic to maintain desire network performance.

Response to Arguments

Applicant's arguments with respect to claims 25-36,38-43 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number: 10/022,529 Page 6

Art Unit: 2616

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raj Jain whose telephone number is 571-272-3145. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

RJ June 1, 2006

CHI PHAM